GPS Anti-theft Alarm System

(GPS+GSM+SMS/GPRS)

User Manual

（HC06A）

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release.

1. Accessories:

4Pin Power cable, screw, user manual, Product accessories are subject to the material object.

2. Main functions

- GSM quad-band frequency for globe use;
- Built-in switch power, input voltageDC9-24V;
- Built-in vibration sensor to realize vehicle intelligent anti-theft;
- Can set a number for SOS alarm and anti-theft alarm;
- Can set 10 vice-numbers for receiving the replied message of the device;
- Can connect external SOS button for emergent help(optional);
- Can connect external relay to realize controlling oil and circuit of the vehicle(optional);
- Built-in backup battery to realize illegal cut wires alarm(optional);
- Support original vehicle anti-theft

2.1 Red LED（power/working state）

light state	**instructions**
Fast flash（light on 0.1 second, light off 0.1 second）	low power alarm
Keep lighting	In charging
Slow flash（light on 2 seconds, light off 2 seconds）	full charged
No light	low power/no start-up
Slow flash（light on 0.1 second,　light off 2 seconds）	Normal work

2.2 Yellow LED-GSM state instructions

light state	**instructions**
Slow flash（light on 15 seconds)	GSM initialization
Fast flash（light on 0.1 second, light off 2 seconds）	GSM receive signal normally
Keep lighting	GSM call/GPRS start-up
Keep no light	Not search the GSM signal

2.3 Blue LED-GPS state instructions

light state	**instructions**
Flash（light on 0.1 second, light off 0.1 second）	GPS signal normally
Keep no light	GPS not work

3. Appearance diagram

3.1 Size: L7cmx W4cmx H0.6cm

3.2 Weight: 45g

4. Installation instructions

4.1 Preparation

4.1.1 Open the package to check the device model number is correct, be with full accessories, or else please contact your supplier;

4.1.2 Choose SIM card, need insert a GSM SIM card into the device, please refer to the suggestion of your supplier for SIM card choice.

Notice:

Please turn the device power switch to off before installation or taking out the SIM card;

The SIM card need open the GPRS function;

Please make sure that there are charges in SIM card.

4.2 Installation

The device is hidden type installation, we suggest the device installing by professional institution. Please pay attention to the following points:

4.2.1 To avoid the thieves destruction, the device installation place should be as far as hidden.

4.2.2 Avoid putting the device with reversing radar, car burglar alarm and any other vehicle communication devices;

4.2.3 Can fix the device by ribbon or wide sponge powerful two-side glue stick;

4.2.4 The device has built-in GSM and GPS antenna, make sure the receive side upward and there is no metal shielding.

4.2.5 Recommended installation place: ①The hidden place in the board below the front windscreen; ② The hidden place around former dashboard (nonmetal material for skin); ③The hidden place in the board below the back windscreen.

Notice:

If the windscreen glued by metal thermal insulation layer or heating layer, it will reduce the GPS receive signal and lead to GPS work disorder, then please change the installation place.

5. Wires connection

1. Red wire connects vehicle power anode

2. Black wire connects vehicle power cathode

3. Yellow wire connects cut oil and circuit control wire

4. **White wire connects to original anti-theft wire**

6. Device Parameter Settings

6.1 Initialization

Send SMS "#begin#password#" to the tracker, it will reply "begin ok" and initialize all the settings. (Default password: 123456). Remark: initialization is resetting all the parameters to factory defaults.

For example, send SMS " #begin#123456# ", If succeeded, it will reply "begin ok".

6.1.1 Google link reply

Send SMS "#smslink#123456#" to the tracker, it will reply message with Google link.

Eg, http://maps.google.com/?q=N22.1211212,E113.080933.

6.2 Change password

6.2.1 Set Password: Send SMS: "#password#old password#new password#" to the unit to change the password.

For Example, send SMS: "#password#123456#888888#" to device, it will reply SMS: "password OK".

6.2.2 Be sure keep the new password in mind, you have to upload the software to restore the default setting in case of losing password.

6.2.3 Make sure the new password is in 6 digits arabic numbers, or the device can not recognize the password.

6.3 Authorization

5 cell phone numbers able to be authorized at most, be sure to set the authorization phone number before using.

6.3.1 Device will regard the cell phone number as the authorized number automatically if call the tracker for 10 times continuously and get position correctly.

6.3.2 Set authorization: send SMS"#admin#password#cell phone number#" to set up a authorized number. The other authorized numbers should be set by the first authorized number. If the number is successfully authorized, the unit will reply "admin ok!" in SMS. If set the second authorized number, please send SMS "#admin#password#the first authorized number#the second authorized number# ".

6.3.3 Delete authorization send SMS "#noadmin#password#authorized number#" to delete the authorized number.

6.4 Single Locating

6.4.1 If there is no authorized number, any number dials up the unit, it will report longitude and latitude; If already set authorized number, then it will not respond when an unauthorized number calls it.

6.4.2 When an authorized number dials up the unit, it will hang up and report a real-time Geo-info as below:

*Tracking location, When GPS signals is weak, you will receive the last location when GPS is available. If it is different with its exact current location, pay attention to check the time included in the SMS.

6.5 Get geographical location

6.5.1 Must set the SIM Card APN parameter firstly before using this function, if there is APN user name and password, Please refer to point 6.16 to set.

6.5.2 Send SMS: "#address#password#" to device, it will reply current location info. For example: 50meters around Vienna Hotel,Qinghu community, Longhua, Bao'an district, Shenzhen, Guangdong, china.

6.6 Auto continuous track

6.6.1 Send SMS command "#fix#030s#005n#password#" to the device, it will report the Geo-info at 30s intervals for 5 times. (s:second, m:minute, h:hour). This command setting must be in 3 digits and the maximum value is 255.(remark: when the tracker doesn't open the function that upload data to the tracking system)

6.6.2Unlimited times auto track: Send SMS "#fix#030s#***n#password#" to the device. Remark:device must be connected to tracking software.

6.6.3 Cancellation: Send SMS "#nofix#password#" to the device.

Note: the interval must not less than 20s.

6.7 LBS Tracking

When device lose GPS signal device will track by base station, it will reply SMS including latest cell ID shows current location and the last GPS latitude and longitude location. You can check the exact location by putting the cell ID on www.gps228.com tracking system, also can send SMS" address+password" to the device to get the latest geographical location; if device in GPRS mode, it will switch to base station tracking automatically,and it will show base station tracking on map. Tracking error is existed between base station and actual location, it is related to GSM signal.

Note: this function may cannot use in some certain area.

6.8 Voice Surveillance (optional)

6.8.1 The command to switch between Track and Monitor are "tracker" and " monitor

6.8.2. The default mode is "track" (Tracking status).

6.8.3. Send SMS "#monitor#password#" to the unit, and it will reply "monitor ok!" and switch to

“monitor” mode.
6.8.4. Send SMS “#tracker#password#” to the unit, it will reply “tracker ok!” and restore to “track” mode.

6.9 Vibration alarm

The function default off mode, send SMS “#vibrate#grade level#password#” to tracker (grade level can set 5 levels, 5 is the lowest, 1 is the highest), tracker will reply “vibrate ok!”. “Vibration alarm” will send to authorized number when tracker is being shocked, and one alarm for each shock event trigger.
Cancel: Send “#novibrate#password#” to cancel the vibration alarm, reply “novibrate OK”

6.10 Geo-fence

Set up geo-fence for the unit to restrict its movements within a district. The unit will send the message to the authorized number automatically when it breaches the district.
6.10.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS: “#stockade#password#semidiameter#time#latitude#longitude#” to unit to set the restricted district. In case of breach, it will send SMS alert to the authorized numbers.
Remark: send “#stockade#123456#500#60#22.312451#113.54376#”, 500 represents is the semidiameter of a circle; 60 represents valid time, if the car exceed the range, it will send alert to the authorized number after 60 seconds (valid time default is in second); latitude and longitude represent the current location.
6.10.2 Cancel: Send SMS: “#nostockade#password#” to deactivate this function.

6.11 Movement alarm

6.11.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS: “#move#password#” to the unit, then the unit will reply “move ok!”. In case of such a movement （the unit default distance is 200meters）, it will send SMS alert “please attention shift alarm” to the authorized numbers every 3 minutes.
6.11.2 Cancel: Send SMS:“#nomove#password#” to deactivate the movement alert.

6.12 Overspeed alarm

6.12.1 Set up: Send SMS:“#speed#password#speed number in 3 digits#” to the unit (suppose the speed is 80km/h), eg, send SMS “#speed#123456#080#”, and it will reply “speed ok!”. When the car moves exceeding 80 km/h, the unit will send SMS alert “speed alarm” to the authorized number .
6.12.2 Cancel: send SMS “#nospeed#password#” to deactivate the overspeed alarm.
Remark: The recommended speed should be not less than 20km/h. For below that rate, it will be effected the accuracy by GPS signals drift etc.

6.13 SOS Alarm

Press the SOS for 3 seconds, it will send “SOS alarm + Geo-info” to all the authorized numbers .

6.14 IMEI number checking

Send SMS command "#imei#password#" to the unit, an IMEI number in 15 digits will be replied to your cell phone.

6.15 Terminal (local) Time Setting

England 0 time zone is the default time.

Send SMS “#time zone#password#(S)+hour+minute#”. If set OK, it will reply time ok.

For example, if in GMT+8, send SMS “#time zone#123456#S0810#”. S represents the set time code , 08 represents different time zone hours of tracking time, 10 represents different minutes.

6.16 GPRS setting

User must send SMS via cell phone to set IP, port and APN before starting GPRS.

6.16.1 Setting APN

6.16.1.1 APN standards for Access Point Name and differs from country to country. For more information about the local APN, inquiry from your local GPRS network operator.

6.16.1.2 Send SMS “#apn#password#APN content#APN user name#APN password” via a cell phone and if succeeded, the tracker will return the message “APN OK”.

6.16.1.3 E.g. send SMS command “#APN#123456#CMNET#”. If succeeded, “APN OK” is returned by the tracker in SMS.

Notes: 123456 is password and CMNET is the APN content of China Mobile (One of GSM Operator in china, it has no APN user name and password). If there is no APN user name and password , then no need to write APN user name and password.

6.17 IP and Port setting

6.17.1 Send SMS "#adminip#password#IP Address#Port number#". If succeeded, “adminip OK” will be returned by SMS.

6.17.2 E.g, Send SMS command “#adminip#123456##59.188.196.150#6780#” to the tracker device, If succeeded, “adminip OK” will be returned by SMS.(123456 is default password, 59.188.196.150 is IP, 6780 is port)

6.18 Modes switch between “SMS” and “GPRS”

6.18.1 The default mode is “GPRS”

6.18.2 Send SMS “#noadminip#password#” to the tracker, it will reply “noadminip ok” and switch to “GSM” mode

6.18.3 Send IP command to switch to "GPRS" mode.

6.19 Low battery alarm

Device will send low battery alarm to authorized number automatically if internal battery capacity is lower then 10%.

6.20 Cut oil or circuit

Send SMS " #DK#password#" to device, it will reply "set DK ok", cut oil or circuit successfully.

6.21 Recover oil or circuit

Send SMS " #HF#password#" to device, it will reply "set HF ok", recover oil or circuit successfully.

6.22 ACC function

Send SMS"ACC#ON" to device to start illegal start alarm, when vehicle illegal ignition on, device will reply"ACC!!!" to the authorized number.

Send SMS"ACC#OFF" to device to close illegal start alarm function.

6.23 Device anti-temper function(optional)

If device loses power suddenly, it will send SMS"BJ!!!" to the authorized number.

6.24 Web platform and PC installation tracking software

6.23.1 Web based platform www.gps228.com.

Eg, Configuration IP: 59.188.196.150 Port: 6780.